SKYLAB A PROPOSAL AEROTRIANGULATION WITH VERY SMALL SCALE PHOTOGRAPHY - EREP INVESTIGATION NO. 459
CONTRACT NO. T-4110B

Principal Investigations Management Office
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Analytic aerotriangulation operations are being conducted using photography provided by the SKYLAB S-190B Earth Terrain Camera. This photography consists of a strip of 12 photographs extending from Charlotte, North Carolina, to the Rappahannock River in Virginia. U. S. Geological Survey quadrangles and positions and elevations determined by NOAA/NOS for airport runway ends and aeronautical aids to navigation are being used to provide office-identified control located primarily along the perimeter of the area covered by the SKYLAB photography. Approximately 30 horizontal and vertical control stations have now been office-identified on the photographs.

The preliminary computations have progressed through: 1. Image coordinate refinement and three-photo orientation; 2. Secant plane coordinate transformation; 3. Strip adjustment to ground control; and 4. Block adjustment. The inherent errors in using office-identified control make it necessary to perform numerous solutions involving different combinations of control and weights. As of this report, the maximum positional error occurring at a withheld control station is less than 60 meters. Efforts are continuing to reduce this figure.

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